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Systems Center
ATLANTIC

Theater Medical Information Program Maritime (TMIP-M)

for

USNAC

14 January 2015

Alan Wells, TMIP-M Deputy Program Manager

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Agenda

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- Program Overview
- Organizational Chart
- SSC Atlantic TMIP-M Program Office Responsibilities
- TMIP-M Deployments
- TMIP-M Versions
- Ship Installation Process
- Verification of Encounters/DNBI
- TMIP-M Product Deployment & Release Process
- CANES
- CITRIX
- DT/OT for TMIP-M version 4.0.0.0
- Questions

PROGRAM OVERVIEW

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Program Overview

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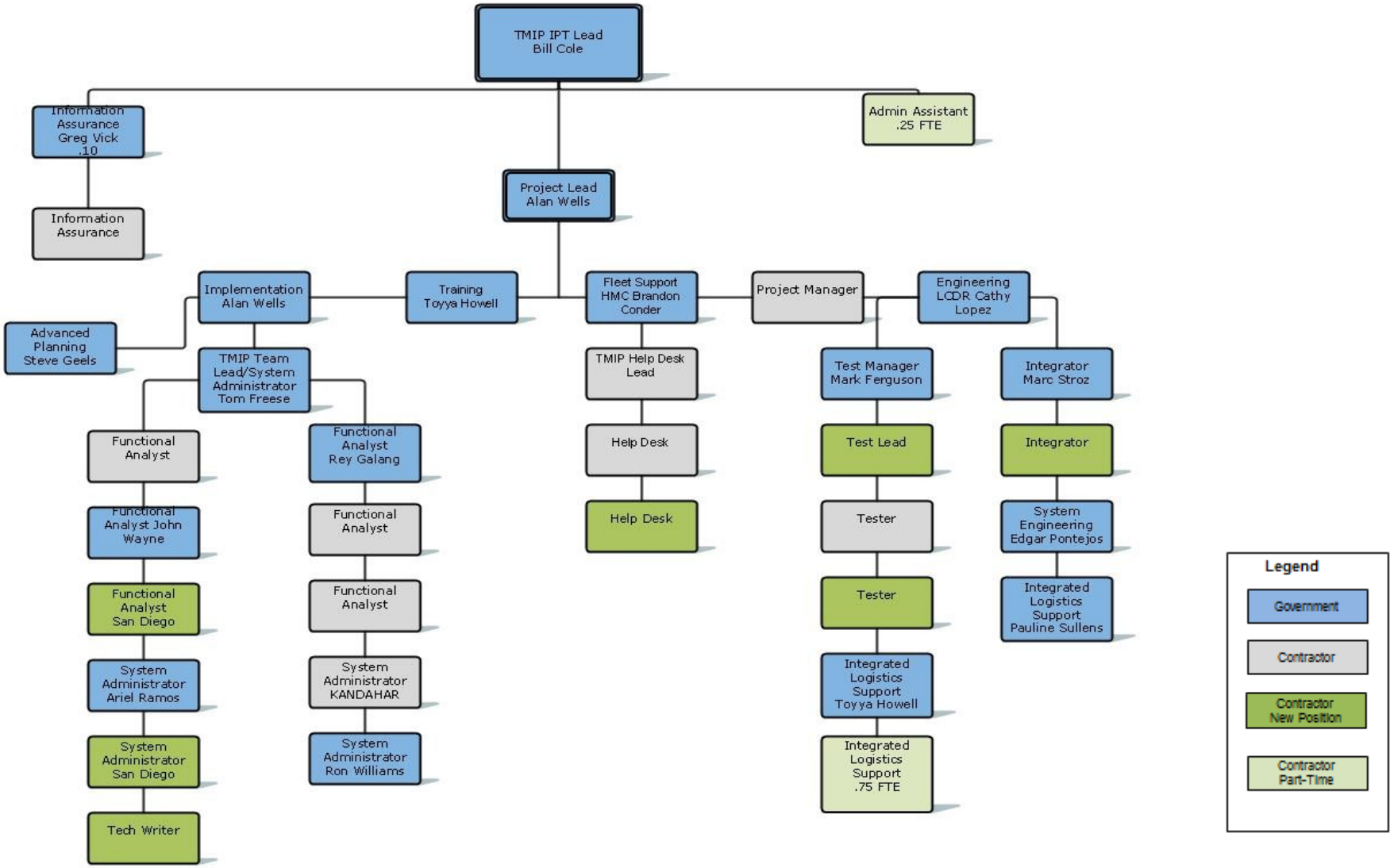
- **The Theater Medical Information Program (TMIP)**
  - "Family of Systems," managed by the Deployment & Readiness Services (D&RS)
  - Extends Garrison-based AHLTA and CHCS capabilities to deployed medical units
- **TMIP-M enables**
  - Complete clinical care documentation
  - Medical Readiness monitoring
  - Immunization Tracking
  - Medical supply and equipment tracking
  - Patient movement visibility
  - Environmental Health surveillance
  - Radiation Health
  - Virtual Lifetime Electronic Record (VLER)
  - Bi-directional Health Information Exchange with VA

ORGANIZATION

TMIP-M Organizational Chart



RESPONSIBILITIES

SSC Atlantic TMIP-M Program Office Responsibilities

- **SSC Atlantic TMIP-M PMO is responsible for:**
  - Deployment of D&RS TMIP-J software applications to all Navy Medicine operational MTFs afloat and ashore
  - Implementation and sustainment training
  - Naval Capabilities Advocate to the TMIP-J program
  - Formal documentation and routing of Naval Capability requirements through the TMIP-J Requirements Management process
  - Coordination with Navy Communications and Hardware Infrastructure Programs of Record (PMW-160)
  - Developmental/Operational Test Support
  - 24/7 Help Desk through NAVY311
  - Engineering and Integration with CANES/EA/ISNS
  - SAMS/MMM Sustainment

TMIP-M DEPLOYMENTS

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TMIP-M COMNAVAIRFORCE

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SHIP	TMIP-M VERSION	SAMS/MMM VERSION	ISNS/CANES
CVN 68	2.0.5.0 P1	SAMS 9.0.3.1	ISNS
CVN 69	3.0.5.0	MMM 1.1.0	CANES
CVN 70	2.0.5.0 P1	SAMS 9.0.3.1	ISNS
CVN 71	2.0.5.0 P1	SAMS 9.0.3.1	ISNS
CVN 72	2.0.5.0 P1	SAMS 9.0.3.1	ISNS**
CVN 73	2.0.5.0 P1	SAMS 9.0.3.1	ISNS
CVN 74	3.0.5.0	MMM 1.1.0	CANES
CVN 75	2.0.5.0 P1	SAMS 9.0.3.1	ISNS
CVN 76	3.0.5.0	MMM 1.1.0	CANES

TMIP-M VERSIONS

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TMIP-M Versions

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- **I2R1**
  - Version 2.0.5.0 (Oracle 10.2.0.5)
  - Version 2.0.5.0P1 (Oracle 10.2.0.5)
- **I2R2**
  - Version 3.0.5.0 (Oracle 11.2.0.3)

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TMIP-M Versions, Cont.

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- **TMIP-M is currently installed onboard 160 ships and 9 MTFs**
  - 160 ships are installed with either TMIP-M I2R1 version 2.0.5.0 or 2.0.5.0P1 OR i2r2 VERSION 3.0.5.0
  - All I2R1 sites are installed with Oracle Version 10
- **Version 2.0.5.0P1 is a patch that enhances RADHEALTH capabilities**
  - Applicable to CVNs, LHDs, LPDs, LSDs, LCCs, and submarines
- **Upcoming TMIP-M I2R2 version 3.0.5.0 (CANES) ships are:**
  - USS NIMITZ CVN 68 (Mar 15 – Jun 16)
  - USS CARL VINSON CVN 70 (Aug 15 – Feb 16)
  - USS THEODORE ROOSEVELT CVN 71 (Mar 16 – Sept 16)
  - USS ABRAHAM LINCOLN CVN 72 (Jan 15 – Oct 16) (SCN)
  - USS HARRY S TRUMAN CVN 75 (Sept 16 – May 17)

SHIP INSTALLATION PROCESS

Ship Installation Process
Force Level Ship – 3 Weeks

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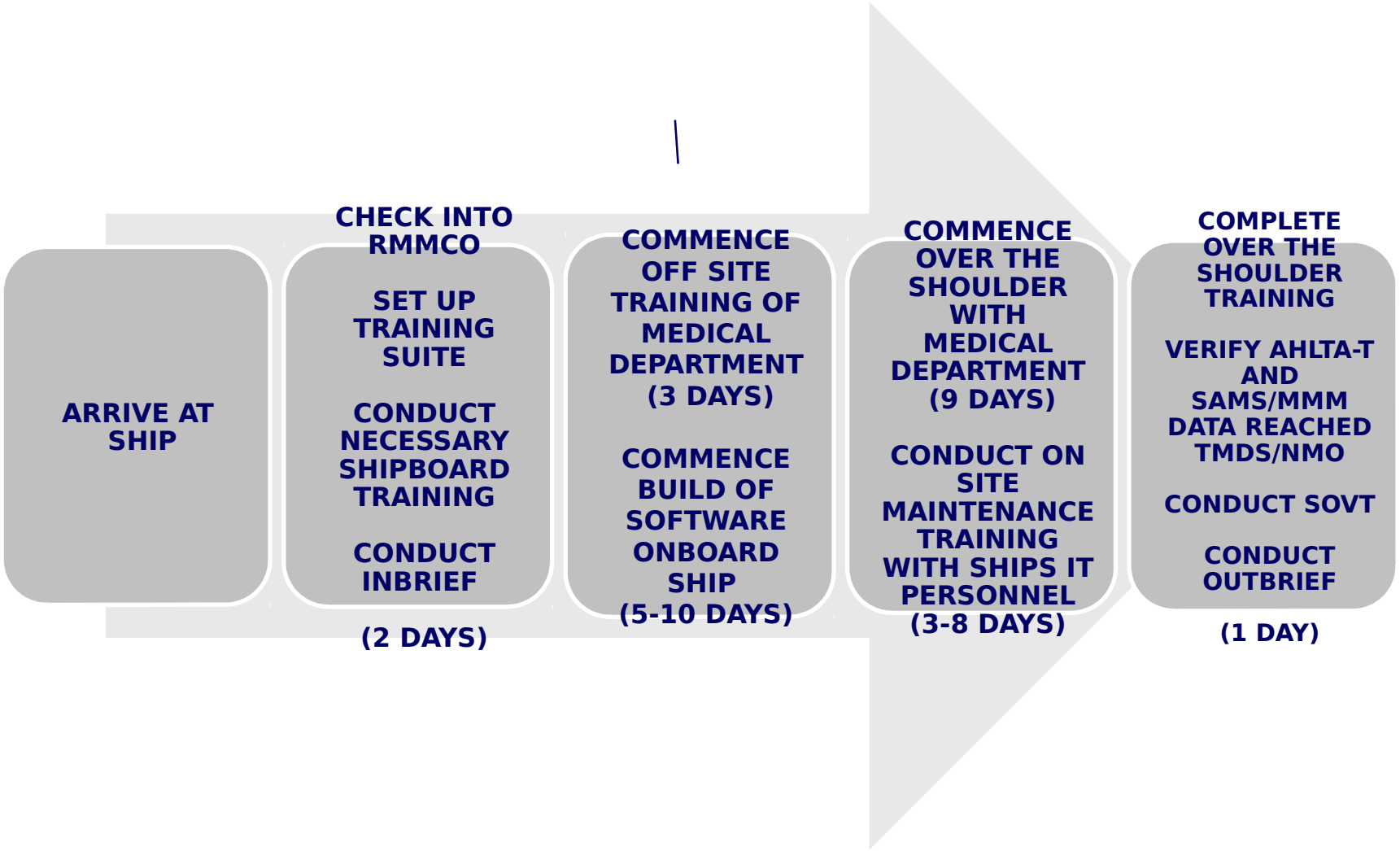
ARRIVE AT SHIP
CHECK INTO RMMCO
SET UP TRAINING SUITE
CONDUCT NECESSARY SHIPBOARD TRAINING
CONDUCT INBRIEF
(2 DAYS)
COMMENCE OFF SITE TRAINING OF MEDICAL DEPARTMENT (3 DAYS)
COMMENCE BUILD OF SOFTWARE ONBOARD SHIP (5-10 DAYS)
COMMENCE OVER THE SHOULDER WITH MEDICAL DEPARTMENT (9 DAYS)
CONDUCT ON SITE MAINTENANCE TRAINING WITH SHIPS IT PERSONNEL (3-8 DAYS)
COMPLETE OVER THE SHOULDER TRAINING
VERIFY AHLTA-T AND SAMS/MMM DATA REACHED TMDS/NMO
CONDUCT SOVT
CONDUCT OUTBRIEF
(1 DAY)

Verification of Encounters/DNBI

- **How can providers verify encounters are sent to TMDS?**
  - Ensure encounter notes are completed/signed in AHLTA-T
  - Verify messages have been sent by TF Admin
  - Log into TMDS and verify encounters are posted
- **DNBI**
  - Information is collected at the Theater Medical Data Store
  - Data is only sent if encounter is signed
  - Recent review of fleet unit showed 300 encounters unsigned. Oldest encounter was 19 months old

PRODUCT DEPLOYMENT AND RELEASE PROCESS

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Incremental Releases

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- **Deploy D&RS incremental releases to all Ships, Submarines and Operational MTFs**
  - **I2R2 (WIN7 Compliant)**
    - System Acceptance Testing completed November 2012
    - MOT&E completed July 2013
    - Navy Integration and IA testing completed February 2014
    - FOT&E completed August 2014 (CVN 74)
    - **Full fielding decision received October 2014**
  - **I2R3**
    - Final Release – TMIP moves to sustainment
    - **D&RS expects delivered to services 23 December 2014**
    - Navy will upgrade all sites to I2R3 (FY16/17 – FY22)

CANES & TMIP-M

CANES & TMIP-M

- **TMIP version(s) 2.0.5.0 and 3.0.5.0**
  - **Compatible** with and **Approved** for CANES
  - Currently installed on 3 CVN's (3.0.5.0)
  - Currently installed on 13 DDG's (2.0.5.0)
- **Currently in possession of IATO for 3.0.5.0**
  - Expires 19 Mar 2015
  - Requires PKI/CAC Waiver
- **Recent CVN experience:**
  - Outstanding Support from both Medical and ADP
  - I2R2 technically complex results in need for more dedicated ADP support as well as more involved medical administrator training
  - Two issues/concerns (from our perspective)
    - Encryption delta between CANES and Shipyard impacted MMM

CITRIX

CITRIX

- **Currently in possession of IATO for CITRIX**
  - Approved version is 4.X
  - CITRIX is approved under TMIP-M version 3.0.5.0

DT/OT for TMIP-M version 4.0.0.0

TMIP-M Developmental Test (DT) / Operational Test (OT)

- **COMOPTEVFOR requires CANES CVN/LHD for OT**
  - D&RS released version 4.0.0.0 to services on 23 Dec 2014
  - D&RS requires Operational Test community to perform MOT&E in July/August 2015
  - Navy Plan for DT
    - Conduct 1st phase between 28 Jan and 8 Feb in SPAWARSYSCEN Atlantic Lab
    - Conduct 2nd phase between March and April in SPAWARSYSCEN Pacific (CANES) Lab
    - Conduct 3rd phase from 4 -22 May in SPAWARSYSCEN Atlantic Lab
    - Conduct 4th phase in July 2015 onboard OT platform (TBD). Final tune-up (TECHEVAL) to ensure ship and system is ready prior to MOT&E.
  - **SPAWARSYSCEN Atlantic's top three priorities in testing version 4.0.0.0:**
    - PKI/CAC enabled

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Questions?

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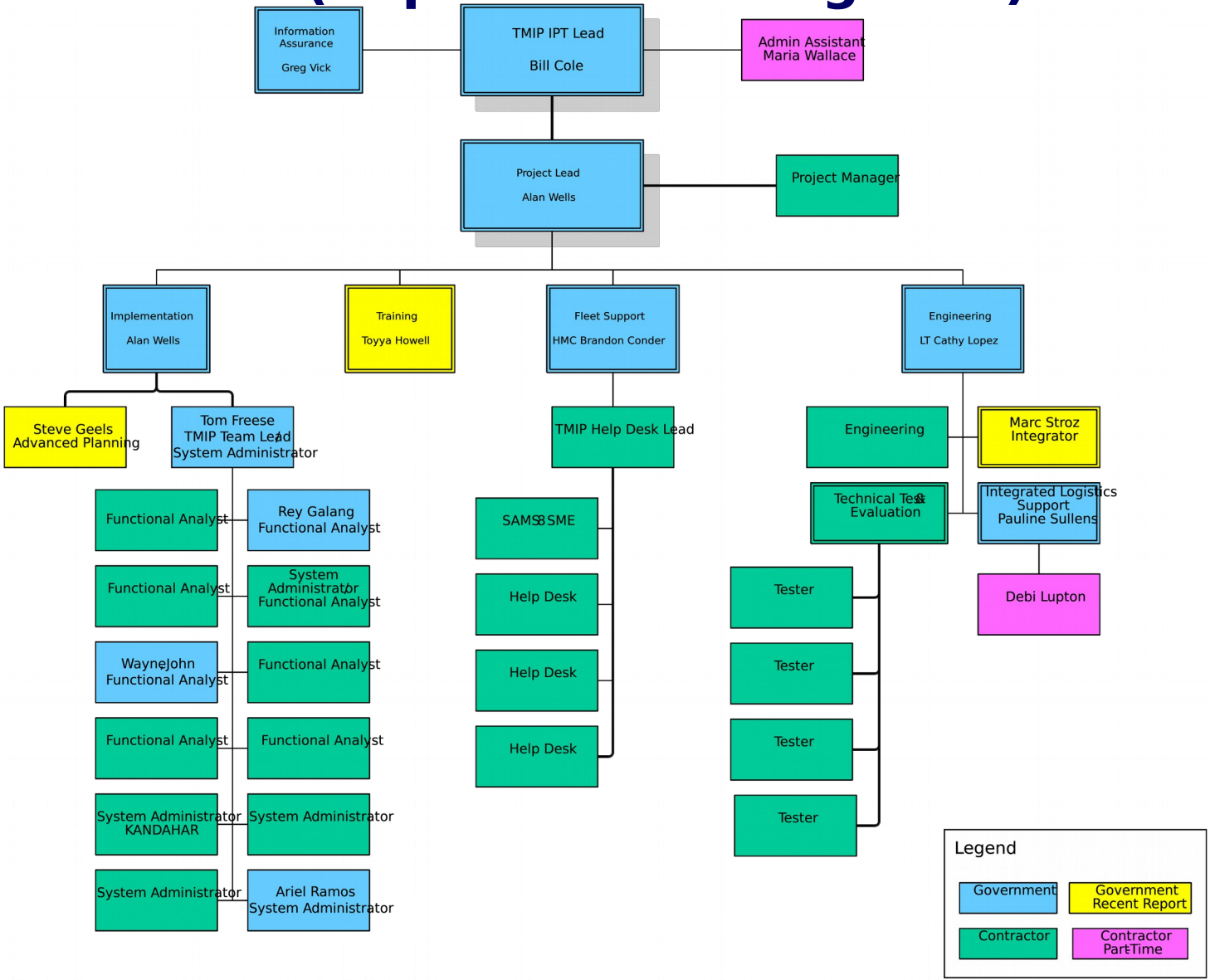
THEATER MEDICAL INFORMATION PROGRAM
MARITIME

BACKUP SLIDES

TMIP-M
Staffing FY12 v FY13
(impact of funding cuts)



Understanding the Value of an EHR in the Department of Defense

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Why we must do it

- Warfighter Mission
- Enables DoD's healthcare part of the Virtual Lifetime Electronic Record (VLER)
- Document and Monitor Wounded, Ill and Injured
- Enhanced Health Outcomes
- Cost Effectiveness
- Better Health Resource Management
- Health Community Satisfaction
- Patient Centric Medical Home
- Enhanced Access and Quality of Care
- Enhanced Patient Safety
- Foundation for Benefits Assessment

Who we do it for

Service members, Retirees, their families, other beneficiaries, the Military Health System (MHS) community, Operational Commanders, and other stakeholders

What we will achieve

Right Information
Comprehensive
Integrated
Interoperable
Intuitive
Accurate

Right Community
Health Care Team
Patients
Commanders
Veterans Affairs
Nation (NHIN)

Decision Support for High Quality Cost Effective Healthcare

Right Place
Global Presence
Theater Operations
Contingency Operations
Austere Environments
Mature Communications
Mobile Operations

Right Time
Fast
Dependable
Clinical Workflow
Highly Available
Time to Market
Innovative

TMIP Family of Systems

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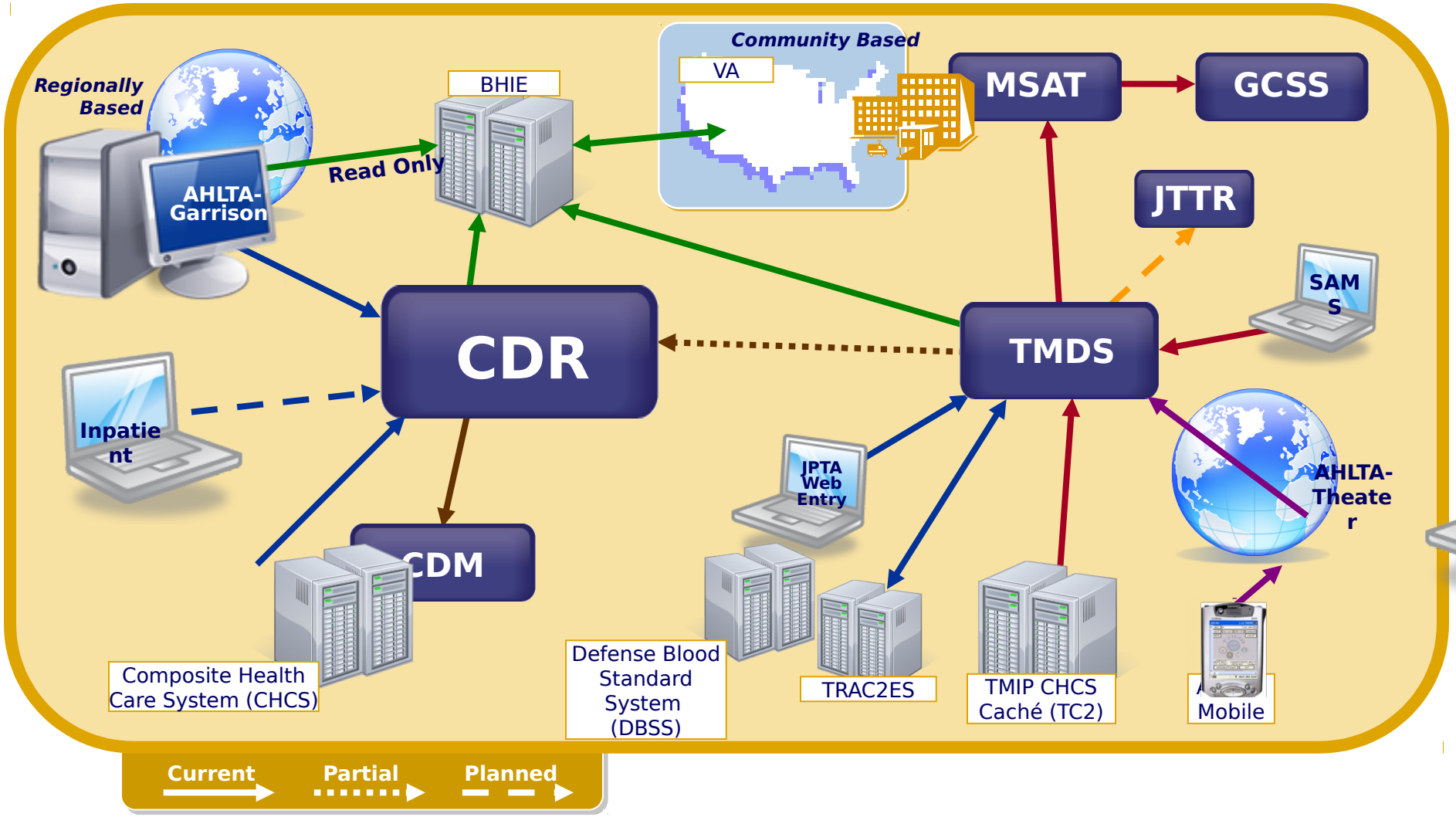
Applications

AHLTA-Theater
AHLTA Warrior
AHLTA-Mobile
TeleHealth
TRAVAX
EIC
TMDS
MSAT
MAT/JMAT
JTTR
JPTA
BHIE-T
TMIP CHCS
Caché (TC2)
DOEHRS - IH
DCAM
PMITS
DMLSS
T-DBSS
TRAC2ES
Mobile
SAMS
GEMS
MEDIC
GCSS

Mission Pillars

Medical Data Integration: Today



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Key Capabilities

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- **Modular, scalable healthcare documentation system built to operate in low to no communications environments.**
- **Supports Service members' continuum of care from the battlefield to the home front.**
- **Captures and manages health information in support of the military's electronic health record (EHR).**
- **Supports the delivery of advance medical care in the most challenging conditions.**
- **Shares DoD pertinent clinical data with the VA.**

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Current TMIP-M Capabilities

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AHLTA-Theater

- Outpatient Treatment Documentation

TMIP CHCS Caché (TC2)

- Technical Refresh of CHCS-NT
- Inpatient Treatment Documentation
- Pharmacy, Laborato Radiology Support

Shipboard Non-tactical Automated Data Processing Program (SNAP) Automated Medical System (SAMS)

- Health Systems
  - IMR, Exams, Immunizations
- Environmental Health
  - Water, Pest, Sanitation
- Radiation Health
  - Naval Dosimetry Program

Current TMIP-M Capabilities, Cont.

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Military Situational Awareness Tool (MSAT)

- Command and Control
- Medical Surveillance
- Classified/SIPR

TMDS

- WWW access to patient data
- Medical Surveillance
- All providers authorized accounts
- Unclassified NIPR

TMIP-M Product Deployment Process

- **Separate approval processes for Theater and Afloat Units**

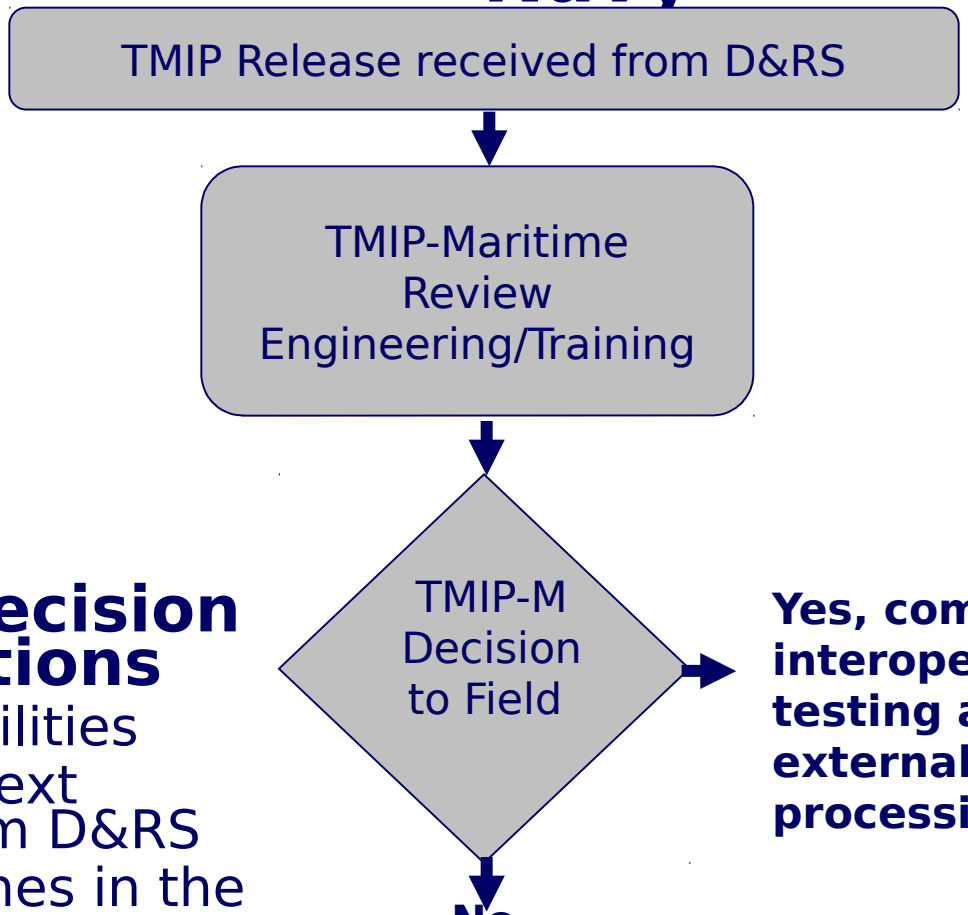
TMIP Release received from D&RS

AHLTA-T/SAMS9/MMM

AHLTA-T/TC2/DCAM/PMITS

- **Separate approval processes for each ship class, or submarine; and for each individual ship**

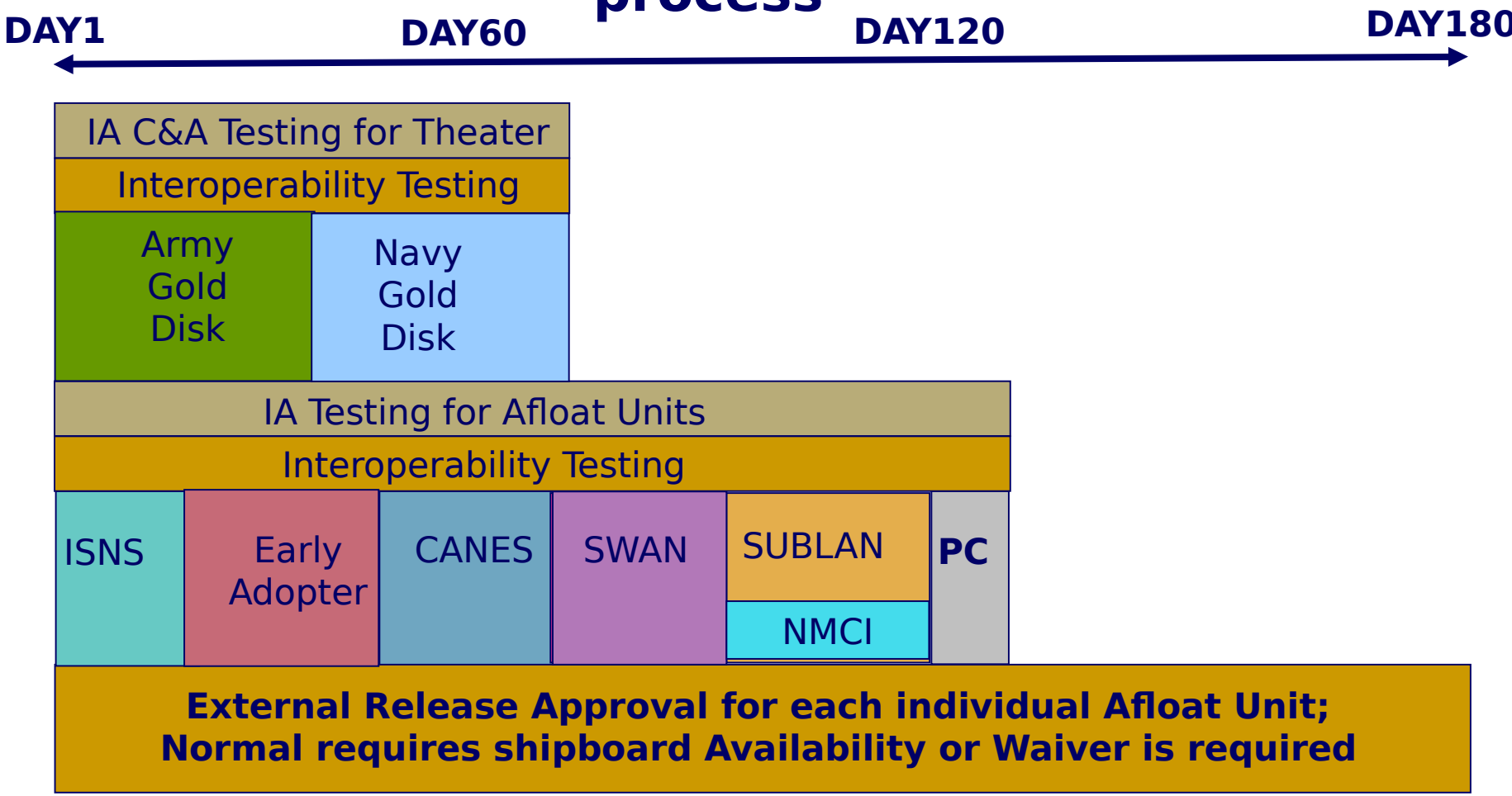
TMIP-M Release Workflow Within Navy


TMIP Release received from D&RS
TMIP-Maritime Review Engineering/Training
TMIP-M Decision to Field
Yes, commence interoperability, IA testing and external release processing
No, wait for next release

- **Fielding Decision Considerations**
  - New Capabilities
  - Timing of next release from D&RS
  - # of baselines in the Fleet

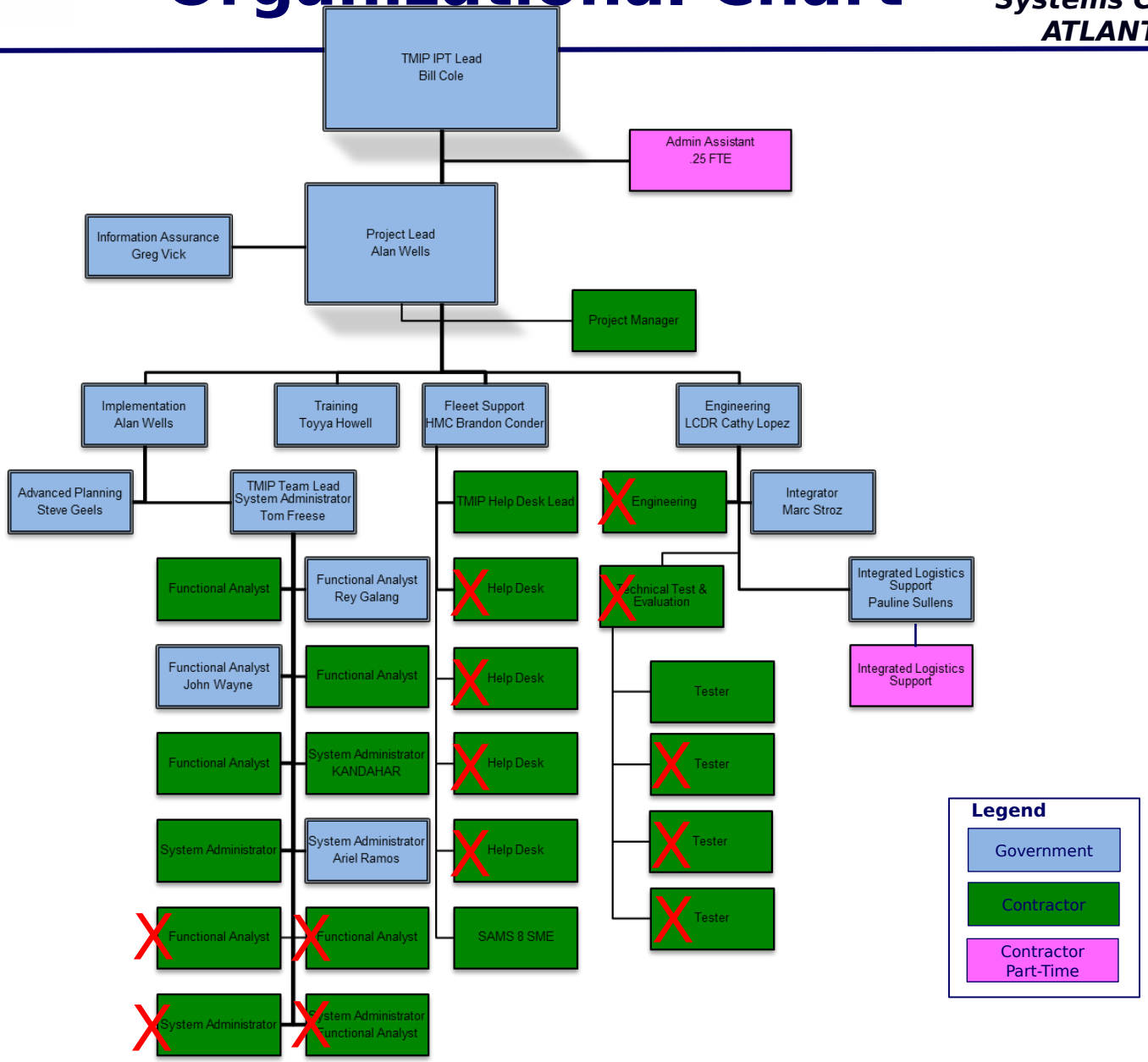
TMIP-M Testing and External Release Process

- **Approximately 6 month testing and approval process**



OPTEMPO

TMIP-M Organizational Chart



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TMIP-M OPTEMPO

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- **Reduced Budget Results**
  - **Recent Loss of Key Personnel**
    - **Tim Rice left and took job with USNS COMFORT to support TMIP-M**
    - **Dissatisfied with multiple responsibilities and being placed in tasks not originally "signed up for"**
    - **Assignments were necessary due to loss of 13 personnel in FY-13**
  - **Workforce Composition**
    - **2 of 3 System Administrators are in late 50's**
    - **1 of 3 System Administrators will leave in near term for medical school**
    - **No budget to support bringing new System**

TMIP-M OPTEMPO, Cont.

- **Reduced Budget Results**
  - **Multiple Tasking**
    - **Installation team supports help desk and test team when not on road**
    - **External Release supports SAMS 8 requirements in addition to multiple versions of TMIP-M. Specifically had to do all work to prepare for SAMS 8.3.3 (ICD-10) release for dissemination to fleet. Although it will be a mail out all requirements for installation had to be met.**
    - **Engineering team supports:**
      - **Multiple testing requirements from D&RS, PMW-160 and SAMS development**
      - **Multiple integration engineering requirements from D&RS and PMW-160**

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TMIP-M OPTEMPO, Cont.

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- **Reduced Budget Results**
  - **Impact to Fleet Support**
    - **60% reduction of Help Desk staff/support in FY13**
      - **Prior to reduction five personnel on help desk staff; two remaining**
      - **Necessary to adjust working hours to cover forward deployed forces – resulting in only one help desk technician on site at any time**
    - **Approx. 30% additional sites to support since FY13 budget reduction; 40% for FY-14 and 45% for FY-15**